MEMORANDUM

TO: Luis Alejandro, Chief, Water Management Section (USACE)

- **FROM:** John Mitnik, Director, Operations, Engineering & Construction Division (SFWMD) Akin Owosina, Chief, Hydraulics & Hydrology Bureau (SFWMD)
- **DATE:** March 23, 2016

SUBJECT: Operational Position Statement for March 22, 2016 to March 28, 2016

This Position Statement is for the one-week period from March 22, 2016 to March 28, 2016. On March 21 the Lake Okeechobee stage was 15.25 feet, NGVD, in the Low Sub-band of the 2008 LORS. During last week the Lake stage experienced a decrease of 0.19 feet.

District-average rainfall for the month of March has been very low so far (0.46 inches, or 24% of Average). Rainfall for the upcoming week (likely Thursday through Saturday) is forecast to be above average, and near-average for the following week.

<u>Precipitation Outlook:</u> Consistent with the forecast El Niño conditions, the most recent Climate Prediction Center (CPC) outlook for Central and South Florida indicates an increased likelihood of above-normal rainfall (45%) for the month of April 2016, and increased chances of above-normal rainfall (45%) for the three-month window April to June 2016. The CPC rainfall outlooks into the 2016 wet season are for equal chances of above, below and normal rainfall. The long-range CPC outlook for the 2016-17 dry season is for increased chances of below-normal rainfall.

<u>2008 LORS Release Guidance (Part C):</u> With the Lake Okeechobee stage within the Low Sub-band, Part C of the 2008 LORS release guidance recommends "Up to Maximum Practicable to the WCAs if desirable or with minimum Everglades Impacts. Otherwise no releases to the WCAs"

Over the 7-day period from March 14, 2016 to March 20, 2016, releases from Lake Okeechobee to the STAs were as follows: 1,400 ac-feet to STA-1E, 2,700 to STA-1W and 2,300 to STA-2. These releases were mainly for stage maintenance and in preparation for forecast rainfall. No releases from the Lake south to STA 3/4 were made. Releases from the Lake into the A-1 FEB were about 12,100 ac-ft. Releases from the Lake to tide via C-10A, L-8 and C-51 were approximately 100 ac-ft.

USACE has requested the District to implement Lake regulatory releases into WCA-1, in such a way that inflows and outflows are balanced and the current stage recession continues. The District will continue to implement releases from the lake to the A-1 FEB, and from the A-1 FEB to STA-2. Flows entering WCA-2A will be balanced with outflows to tide. These two operations will be contingent on the amount of rain the District could receive towards the end of this week.

<u>2008 LORS Release Guidance (Part D):</u> With the Lake Okeechobee stage in the Low Sub-band, Part D of the 2008 LORS release guidance recommends "S-79 up to 3,000 cfs and S-80 up to 1,170 cfs".

In the St. Lucie Estuary, salinity during the past week increased from the poor range to the fair range for adult oysters. In the Caloosahatchee Estuary, salinities at Sanibel and Shell Point remained in the good range for adult oysters. Salinity at Cape Coral remained in the poor range.

<u>Projection for Next Week:</u> Looking ahead, if the current dry weather pattern continues, then the Lake level will likely continue to recede within the Low Sub-band of the 2008 LORS. As the stage recedes toward the Baseflow Sub-band, the LORS guidance described on page 7-15 of the WCP will suggest reducing releases.

Furthermore, if dry conditions persist the LORS release guidance could suggest reducing releases to Baseflow release rates (S79 / S80 = 450 cfs / 200 cfs). If the LORS guidance suggests Baseflow releases, then the SFWMD's Lake Okeechobee Adaptive Protocols would be considered for the SFWMD's recommendation per SFWMD Governing Board direction. Because salinity conditions in the Caloosahatchee Estuary are fresh the Adaptive Protocol guidance may suggest no releases at S-79. The Adaptive Protocol release guidance flowchart was designed primarily to guide release recommendations pertaining to environmental water supply releases while balancing the water supply needs of permitted users and as such was **not** focused on conditions as experienced during this El Niño dry season with higher Lake stages. SFWMD scientists will be recommending that releases be reduced below the harm range (S79 / S80 = 2800 cfs / 2000 cfs) and transitioned down to Baseflow rates as lake levels continue to decline.

Detailed reports are available at the SFWMD Operational Planning Portal.

